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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/881,608 | 06/14/2001 | Kai Sipila | FORSAL-13 | 6400 |

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EXAMINER

FORTUNA, JOSE A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1731

DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/881,608

Applicant(s)

SIPILA ET AL.

Examiner

José A Fortuna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 U.S.C. § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the phrase “the raw material,” in line 1, lacks of antecedent basis. Also claims 1 and 2, the phrase “to a considerable extend” renders the claim vague and indefinite since the metes and bound of patent protection can not be ascertained, i.e., to what extend is a “considerable extend.”

Regarding claim 2, the phrase "or another type " renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or another type"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claims 3, 5, 6-7 are vague and indefinite since it is unclear what waste fraction applicants are referring to, i.e., the waste fraction to be used as fuel before or after the screening?

Claim 4 is vague and indefinite as to what is to be considered “poor quality.” Note that the specification does not provide ways to determine the quality of the waste.

In claims 6-7, the phrase “the combustible waste” lacks of antecedent basis.

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In claims 8, the phrase “the drying” lacks of antecedent basis.

In claim 9, the phrase “ash produced,” lacks of sufficient antecedent basis, since it was not previously established that ashes are produced in the process.

In claim 11 the phrase “or another bleaching process,” is not understood, since it is unclear how a bleaching process produces ashes.

In claim 12 the phrase “a best quality fraction of the ash,” lacks of sufficient antecedent basis, since it was not previously established that the ash is fractionated.

In claim 13, “the other ash,” lacks of antecedent basis.

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Column*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-8, 14-17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dieter et al., GB 2026019 (cited in Information Disclosure Statement of paper no. 5).

Dieter et al. teach a way of utilizing refuse in which two stream are separated from the waste, a paper fraction which is further processed and residual fraction which is used as combustible/fuel in the papermaking process or another process, see abstract. Dieter et al. are silent with respect to the screening of the waste to be used as fuel. However, further screening the waste including the waste fraction to be used as fuel does not add any patentable weight to the claims since it is within the levels of ordinary skill in the art as an optimization process in order to obtain the greater amount possible of the useable material(s). Applicants have not shown unexpected results in the separation of the fibrous part of the fuel waste and therefore, the separation of fibrous part from the fuel waste is within the levels of ordinary skill in the art. Note

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also that it has been held that “[A] combination of reference teachings may be obvious in the technological sense even though business or economic considerations would previously have counseled against such a combination.” *In re Farenkopf*, 713 F2d; 219 USPQ 1.

As to the dependent claims, Dieter et al. teach the pyrolysis of the waste and the use of the energy in the papermaking process.

6. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dieter et al. in view of Puskar, US Patent No. 3,765,921 or Krogerus et al. in “Use of Waste paper ash as paper filler,” (Both cited in the Information Disclosure Statement of paper no. 5).

Dieter et al. invention has been previously discussed, see above. Dieter et al. fail to teach the use of the ash produced by the incinerated waste. However, Puskar and Krogerus et al. teach that ash(es) from waste can be used as filler in papermaking. Therefore, using the ashes obtained from the incineration/pyrolysis process taught by Dieter et al. would have been obvious to one ordinary skill in the art since less, if any, external filler(s) would required in the process, therefore improving the economics of the process, and at the same time helping the environment, i.e., less landfill.

7. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dieter et al. in view of Säfström et al., WO 95/12549, (cited in Information Disclosure Statement of paper no. 5).

Dieter et al. do not teach the treatment of the water as claimed. However, Säfström et al. teaches the same treatment as claimed that can be used to treat water from other sources to be

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used in the papermaking operation. Therefore, using Säfström et al. purification treatment in Dieter et al. invention would have been obvious to one of ordinary skill in the art in order to obtain the maximum benefits of the resources, (optimization), and to obtain a closed system which would reduce the amount of waste to the landfill, (environmental control). Note that energy needed to evaporate the waste water would/could be generated by the combustion of the fuel waste.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of "Waste utilization in papermaking."


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to José Fortuna, whose telephone number is (703)305-7498. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin, can be reached on (703)308-1164. The fax number for this group is (703)305-7115.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-0661.

When filing a FAX in group 1730, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

José A. Fortuna
January 26, 2003


JOSE FORTUNA
PRIMARY EXAMINER
ART UNIT 1731